Lessons Learned

In this issue, JAB continues a series of editorials from highly impactful faculty and researchers on “lessons learned” throughout their careers or lives. The hope is that the rest of us can benefit from their experiences. I would like to thank these individuals for sharing their thoughts with us.

—Michael Madigan, Editor-in-Chief

I was invited to write this editorial just after I had accepted an offer to retire. Australian universities have struggled during the pandemic because, due to ever diminishing government funding, they have become dependent upon fees from international students. With the country’s borders closed to control the spread of COVID-19, most Australian universities have lost substantial portions of their operating budgets and are desperately cutting costs. As a strategy to reduce staff costs, the University of Wollongong (UOW) offered a Voluntary Early Retirement scheme, which I accepted. Retirement has come much earlier than I anticipated. However, stepping aside creates an opportunity for an early career biomechanist to take the reins, and I can’t wait to see what he achieves. Now, as an emeritus professor, I have a wonderful opportunity to step away from the mundane aspects of academia and to “play” with elements of the job that I love, especially the writing and research. So . . . as “retirement” begins, now is an ideal time for me to reflect on lessons learned throughout my career. In preparing this editorial, I perused the sage words of my colleagues, Hamill,1 Herzog,2 and van Dieen,3 who have already shared their experiences in this series. Rather than repeat their wise words, I have tried to focus on a few key lessons I have learned that have not yet been covered.

Be Passionate and Persistent About Your Research

Most people’s working careers will extend for at least 40 years, often longer in academia. Academia, however, can feel like a world of rejection, especially to an early career academic who is struggling to gain that first academic position, whose detailed grant application was unsuccessful despite hours of preparation, and whose prized manuscript has been rejected yet again. To survive and thrive in academia, you must be truly passionate about the research you pursue. It is this passion, combined with your commitment, dedication, and perseverance, that will keep you motivated and driving forward, irrespective of the many rejections you receive. Over 4 decades, I learned to use my numerous “rejections” as learning experiences to improve future applications and manuscripts, rather than seeing rejection as a failure. For example, in the 1990s, I embarked on a breast health biomechanics research program with a goal to empower all women, irrespective of their age, health status, or breast size, to exercise in comfort and enjoy the health benefits associated with an active lifestyle. The first breast biomechanics abstract I submitted to an international biomechanics conference, however, was rejected because the research was “likely not relevant to the audience.” A UOW senior executive member also expressed concerns with a media release about our “Smart Bra” research because it “might not be taken as serious research.” After 3 decades of passionately persevering with this program, our breast health biomechanics research has now gained international acceptance, with invited review papers on this topic recently published in highly respected journals.4,5 In 2018, I was honored to be invited to present a plenary address at the World Congress of Biomechanics on the “Biomechanics of building better bras for breast cancer survivors.” And in 2016, the UOW profiled our “Bionic Bra” research in a strategic rebranding campaign, with stories of our breast biomechanics research featured in both national and international media. So . . . be passionate and persistent about the research you pursue, irrespective of the rejections you will receive. Embrace the challenges and use each rejection as an opportunity to gain feedback and to reflect on your work in order to enhance that next application or manuscript. Most importantly, celebrate your successes when they arise because you know how hard you have worked to achieve each goal.

Nurture a Committed and Supportive Team

One of the proudest legacies of my career is establishing the Biomechanics Research Laboratory (BRL) at the UOW and, more importantly, guiding the inspirational students who have graduated from the lab. When I initially established the BRL, the “lab” only included myself and a couple of research students. Together, we created the laboratory name, designed a logo, developed a strategic plan, and implemented a set of operational guidelines. Although we had minimal funding or infrastructure, we had a clear vision and commitment to drive our research agenda forward. As time progressed, we secured dedicated laboratory space and a room where the increasing number of BRL students could be housed together to foster research relationships. And we expanded our simple logo into a Web page and branded clothing to promote our identity. For the past 3 decades, the BRL has been housed in one of the oldest and “least attractive” buildings on campus. But we have turned this space into a productive hub of research creativity. It meets our needs, and by being so old (on the outside at least), no competing groups within the university will ever try to secure the space. Although small, the BRL has provided a “home” in which to nurture a strong research culture focusing on evolving research themes that the team are dedicated and committed to. It has ensured new research students and visitors have a strong support network provided by established BRL members, who share their expertise and experiences, and celebrate team successes. It has allowed senior students to gain experience mentoring more junior students. And it has maximized all our publishing opportunities. Although various university schemes to formalize research groupings have been available over the years, we have maintained the same simple but focused structure, with the same name and vision for over 30 years. The small team that started out has grown to today’s BRL that is a recognized and celebrated research node within the university and beyond. In research, it is not the number of “bells and whistles” or shiny new buildings that will create research
success; instead, the most crucial factors are the people involved and the research culture you create. Dedicated, committed, and passionate students are one of the most important “ingredients” in any successful research team. Providing a supportive research “home” with a clear vision and positive research culture that enables people to explore their passion will allow research team members to excel and will help attract other students to your research program, ultimately increasing your overall productivity.

Commit to a Professional Society

In his editorial on lessons learned, Hamill\textsuperscript{1} commented on the importance of early career researchers attending professional meetings. In total agreement with this notion, I would also encourage early career researchers to find a professional society, preferably an international one that complements their research area and try to consistently attend the same society’s conference each time it is held. Although I agree that attending a variety of conferences is beneficial, selecting one to target on an ongoing basis has some unique benefits. In addition to presenting and receiving feedback about your research to an international audience, regular attendance allows you to develop a strong global network as faces become familiar and you swap stories during events. Opportunities to become actively involved in the society, particularly as other members recognize your regular attendance and commitment to the society, will then arise. Such opportunities can further strengthen your international network, provide collaborative research and publication pathways, and lead to the leadership roles that are crucial for career advancement. For example, I first attended an International Society of Biomechanics Conference in Los Angeles in 1989, where I sat spellbound listening to presentations by highly esteemed biomechanists whose names I had known as the authors of classical textbooks (eg, Hay\textsuperscript{6} and Miller and Nelson\textsuperscript{7}). Colleagues graciously introduced a very nervous me to some of my heroes, only for me to discover how welcoming and generous these people were with their time and advice. Twenty years later, after actively participating in most conferences (and being on the executive for over a decade), I was honored to serve as president of the International Society of Biomechanics. Along the way, I made lifelong friendships that have enriched both my professional and personal life. As an early career researcher, there are often opportunities to get involved in professional societies, either as a student representative or an early career researcher representative on some boards. Irrespective of any self-doubt, put your hand up and offer to give things a go because you never know what each opportunity might lead to.

Be Kind to Yourself

An academic career can be relentless. Unlike many professions, there are no definitive limits—how many grant application submissions are enough, how many students should you supervise, and how many publications do you need . . . ? Ensure you have a positive outlet to release the frustration that can accumulate with repeated rejections (for me, it is running along trails) and keep things in perspective. The things that feel so overwhelming or devastating in your early career will be merely a faint memory or a funny story to tell in retirement. Remember that success in an academic career takes time. Savor each step and be kind to yourself along the journey, so you can cherish each memory along the way.

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References